

# **Who Lives in New Jersey Housing?**

## **A Quick Guide to New Jersey Residential Demographic Multipliers**

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## PREFACE

In the 1970s and 1980s, researchers at Rutgers University published a series of national studies (hereinafter, the “Rutgers studies”)<sup>1</sup> that contained information on demographic multipliers—the average number of people and the average number of school-age and public school children found in newly built housing units of different types and sizes. The Rutgers studies provided demographic information for the nation, and for each of the census regions (e.g., Northeast United States) and census subregions (e.g., Middle Atlantic States, which includes New Jersey).

The Rutgers studies were widely applied throughout the United States as well as in New Jersey. Inevitably, however, the Rutgers studies have become dated over time and do not reflect the demographic reality of a noticeable decline in the average household size and the average number of pupils per housing unit. For instance, the number of public school children in the average newly built New Jersey 2-bedroom townhouse dropped from 0.20 in 1980 to 0.13 in 2000, a decline of more than one-third. In other words, the introduction of 100 2-bedroom townhouses in New Jersey as of 2000 would generate only about 13 public school children as compared to 20 pupils two decades earlier. Additionally, there is evidence of a particularly low demographic generation for such recent development configurations as transit-oriented development (TOD).

In short, the practice of using the existing published Rutgers studies produces an erroneous overstatement of the population generated by new development in New Jersey, especially in housing with a strong transit orientation and infrastructure in place.

To improve the state of our knowledge, the following publication by Rutgers University produces demographic information on household size and pupil generation that is: 1. *current*—(incorporates the latest demographic data from the 2000 census), 2. *New Jersey-specific*—(contains demographic data unique to this state alone and is field tested in New Jersey), and 3. *incorporates the experience of emerging development categories*, most notably TODs.

The document’s data is invaluable for accurate demographic projections and development impact assessment. It is important, however, that the data not be abused to exclude certain categories of housing, such as homes with more bedrooms, or for that matter housing in general because of the apprehension that development will generate “too many” new residents and public school children. That exclusionary perspective does not acknowledge current data (the demographic multipliers have declined in size over time), subverts good planning (smart growth calls for a range of housing and a mix of land-uses), and violates the *Mount Laurel* principle of all communities in New Jersey having the obligation of meeting the spectrum of the state’s housing needs.

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<sup>1</sup> Robert W. Burchell and David Listokin. *The Fiscal Impact Handbook* (New Brunswick, NJ: Center for Urban Policy Research. 1978); Robert W. Burchell, David Listokin, and William Dolphin, *The New Practitioner’s Guide to Fiscal Impact Analysis* (New Brunswick, NJ: Center for Urban Policy Research. 1985); Robert W. Burchell and David Listokin. *Fiscal Impact Analysis* (Washington, DC : National Association of Home Builders, 1991); and Robert W. Burchell and David Listokin, *Development Impact Assessment Handbook and Model* (Washington, DC: Urban Land Institute, 1994).

## HOW TO USE THIS GUIDE

As noted, New Jersey officials, developers, and planners are currently referring to demographic data that are at least 25 years old out of date and that do not reflect current trends such as lower average household size, higher density land uses, and a return to transit-oriented development. To address this situation, the current study provides contemporary demographic data for New Jersey that reflects modern population and development trends so that the public and private sectors can make a more accurate assessment of the demographic impacts of new residential development.

This study is *not* meant to provide the *exact* number of people or children that will move into a new residential development. Instead, it presents averages, based on an analysis of 2000 census data, of the numbers of people, school-age children, and public school children that tend to locate in different types of development, such as single-family, multifamily, above and below median value homes, and so on.

The steps to follow when analyzing a specific residential project include:

1. Determine the project's housing characteristics. Are single-family detached homes, townhouses, or multifamily units being proposed? How many bedrooms does each residential unit have? Are units projected to be priced above or below median home value?
2. Go to the table in this study that reflects the above characteristics and look at the average numbers provided. Understand that these are *average* numbers, and that the actual number to be generated by the proposed project is more likely to fall within the statistical range around that average number.
3. To determine where in the range the proposed project is likely to fall, consider community characteristics, such as transit-oriented development, the quality of the school system, and the demographics of similar existing developments that may influence the demographic characteristics of the people who are likely to move into the development under study.
4. Exploratory data is provided in the current monograph on transit-oriented developments. (Exploratory demographic information is also presented for other specialized housing such as *Mount Laurel* homes.) It is not provided for the other types of influences (e.g., quality of the local school system) mentioned above. Using transit-oriented (and other specialized housing) data, if relevant, and best available information on any other applicable features, estimate the number of people, school-age children, and public school children likely to move into the development.

In summary, the most valuable use of this study is to develop a *likely range* of the number of people, school age children, and public school children generated by specific types of new residential development in New Jersey. The study is meant to *start* the informed dialogue about planning impacts of new development, not end it.

## EXECUTIVE SUMMARY

- How many people and school children are generated by new housing in New Jersey? Government and citizens at large understandably are interested in these population figures because it affects the demand for public services and ultimately public expenditures.
- To provide empirical information concerning “who lives in New Jersey housing,” the current Rutgers University publication contains data on the profile of households in New Jersey housing built 1990 to 2000 as monitored by the 2000 U.S. Census 5-Percent Public Use Microdata Sample (PUMS). From the census, Rutgers calculates *demographic multipliers*—the number and profile of people contained in different categories of housing. Multiplier information includes:

*Household Size (HS)*—the total number of persons in a housing unit.

*School-Age Children (SAC)*—the household members of elementary and secondary school (kindergarten through 12<sup>th</sup> grade) age.

*Public School Children (PSC)*—the SAC attending public school.

- The residential demographic multipliers vary by: 1. *housing type* (e.g., single-family detached, single-family attached [townhouse], or multifamily) 2. *housing size* (measured in bedrooms) 3. *housing value* (housing units priced above and below the median value as of 2006 for New Jersey)<sup>2</sup>, and 4. *housing tenure* (ownership versus rental). These four variables have been found by Rutgers to be associated with statistically significant differences in the size of the demographic multipliers, albeit sometimes these differences are measurably modest.
- To illustrate the current demographic information, the residential demographic multipliers of popular configurations of typical housing (in terms of dwelling type, size, tenure, and value) built in New Jersey from 1990 to 2000 are:

**Table E-1**  
**Illustrative New Jersey Residential Demographic Multipliers (2000)**

Housing Type	Housing Size (bedrooms)	Household size (HS)	School-Age Children (SAC)	Public School Children (PSC)
Single-family detached <sup>a</sup>	3 bedroom	2.98	0.58	0.48
	4 bedroom	3.77	1.08	0.87
Single-family attached <sup>a</sup> (Townhouse )	2 bedroom	2.00	0.16	0.13
	3 bedroom	2.66	0.44	0.38
Multifamily <sup>b</sup> (5+ unit structures)	0-1 bedroom	1.69	0.13	0.12
	2 bedroom	1.80	0.12	0.10

<sup>a</sup> Owned and rented units of average value.

<sup>b</sup> Owned units only of average value.

Source: Tables II-1 through II-3.

<sup>2</sup> The above-median and below-median price distinction is as indicated and should not be confused with the distinction between market-priced housing and below-market (or *Mount Laurel*)-priced homes. The indicated dollar figures for New Jersey housing values in this study are as of 2006.

- In other words, for every one-hundred 3-bedroom single-family detached homes, about 298 persons would be generated, including 58 school-age children, of whom 48 would likely attend public school. One hundred 2-bedroom townhouses would generate approximately 200 persons, including about 16 school-age children, 13 in public school. One hundred 2-bedroom multifamily condominiums would contain about 180 persons, of whom 12 would be of school-age, 10 attending public school.
- The above illustrative demographic figures are averages based on the shared experience of comparable housing built in New Jersey from 1990 to 2000 as monitored by the 2000 United States census. This is the latest and most extensive database available to demographers. That data informs the comprehensive multiplier information contained in this document.
- The current study shows:
  - An overall decline in the current (2000) number of residents and pupils generated by new development in New Jersey compared to the figures found in earlier (1980 and 1990) investigations.<sup>3</sup>
  - In general, detached housing currently produces the highest number of residents and pupils compared to attached homes. Detached homes with more (4-5) bedrooms have the relatively largest household size and pupil generation.
  - Common types and configurations of attached housing, such as 2-3 bedroom townhouses and 1-2 bedroom multifamily units, have a relatively low demographic impact.
  - A modest demographic impact especially characterizes homes in a transit-oriented development (TOD). Exploratory data from a sample of New Jersey TODs built to date reveal that the TOD units are generating about one-sixth the number of public school children compared to homes of a similar type, size, value, and tenure yet are not specifically located near transit.
  - Affordable housing—units affordable to low-and moderate-income households (in New Jersey sometimes referred to as *Mount Laurel* homes)—also have a lesser demographic impact than what is commonly believed, as is illustrated shortly.
- It is hoped that the current “Quick Guide” to residential demographic multipliers will serve as an important reference for New Jersey. It replaces demographic information for the state that is quite dated (e.g., based on the 1980 census) yet is still inappropriately referenced. Hopefully, the guide will correct misinformation concerning the demographic impact from New Jersey development. It is commonly assumed at the present time that each new housing unit contains about one public school child. The latest census data (2000) indicates that is the case only for large (four or more bedroom) single-family, detached homes; attached homes generate about 0.1 to 0.7 public school children<sup>4</sup> per unit (e.g., 100 attached units contain about 10 to 70

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<sup>3</sup> The rate of decline has generally moderated or even modestly reversed direction in recent years. For details, see *New Jersey Demographic Multipliers: The Profile of the Occupants of Residential and Nonresidential Development* to be published by Rutgers University.

<sup>4</sup>The range varies by specific housing type, size, value, and tenure.

publicly educated pupils). Further, residential construction of growing popularity in New Jersey, such as transit-oriented development (TOD), generates yet fewer public school children. Exploratory New Jersey data suggests that each TOD unit contains only about 0.02 public school children. In other words, 100 units in a TOD contain on average only 2 public school children.

- Similarly, this study informs the demographic impact of affordable housing, a subject of much misinformation, by providing exploratory data on the household size and number of school-age children and public school children in housing occupied by low-and moderate- income households. To illustrate, about 19 public school children are generated by a 100 unit inclusionary condominium housing development in New Jersey (88 market-priced homes and 12 affordable homes).<sup>5</sup> Approximately 3 of the 19 public school children come from the affordable homes.
- *Demographic multipliers need to be continuously updated, refined and tested.* Rutgers University, in collaboration with New Jersey planners, developers, and government officials, is engaged in that process. Rutgers has tested the census-based pupil multipliers against the real-world demographic experience as ascertained from school records and other sources of information for 61 attached housing developments scattered throughout New Jersey. The 14,191 attached housing units in these developments contain 1,975 public school children (an overall public school children multiplier of 0.14 or 1,975/14,191)—a close fit to the 1,941 public school children that would have been predicted from the census-based multipliers.
- The residential demographic multipliers contained in this document provide important statewide average benchmark data that can only go so far in accurately predicting the actual demographic impact of housing development in a specific community. For instance, a given community may attract “more” or “fewer” public school children per housing unit because of such differences as geography (e.g., housing in New Jersey’s “gold coast” along the Hudson River may attract “Manhattan-oriented” households with few children) and the “quality of the local school district” (e.g., households with more children may disproportionately self-select to live in high-quality school systems).
- *For best results, the state-level data presented here should be supplemented by local analysis,* such as conducting case studies of the actual population, and especially public school children generation of occupied housing developments comparable in character (i.e., type, size, price, and tenure) and location to the subject development(s) being considered by the analyst. For example, in quantifying the likely public school children generation from 3-bedroom townhouses priced at \$300,000 apiece proposed for Princeton Township, an analyst should first consider the “Quick Guide” state-wide data for the average number of public school children (0.24) in housing of this type (single-family attached), size (3-bedrooms), and price level (above median value). The analyst should then identify comparable townhouses (e.g., 3-bedroom units priced \$250,000 to \$350,000) that are occupied in Princeton and nearby communities and should then ascertain these developments’ actual public school children generation from public school data (e.g., busing and other information). The combination of this document’s multipliers and local analysis provides a comprehensive framework for answering “who lives in New Jersey housing.”

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<sup>5</sup> This calculation makes the following assumptions. All the 100 for-sale homes are in structures of 5 or more units. Of the 88 market-priced homes, half are two-bedroom and the remaining half are three-bedroom in size, and all the 88 units are assumed to exceed the median in price. Of the 12 affordable for-sale homes, 25 percent are one-bedroom, 50 percent are two-bedroom, and 25 percent are three-bedroom.

- As with all studies, there are limitations as well as advantage to the current “Quick Guide.”
  - The demographic profile is a moving target and while the current investigation uses the latest available (2000) census information, that itself is becoming dated.
  - While the census is the best source available to demographers it has acknowledged shortcomings, such as under-representation of certain ethnic and racial populations.
  - The demographic profiles derived in this document represent an average based on a sample and there is a variation around the indicated average. For example, the earlier-cited figure of 0.24 public school children for a 3-bedroom more expensive townhouse is based on a statewide sample of 12,151 observations. Variation around this 0.24 average is to be expected and in this case, the variation will typically<sup>6</sup> be between a low of 0.19 public school children and a high of 0.30 public school children.<sup>7</sup>
  - The multipliers are a “snapshot” glance in time (observing in 2000 the demographic profile of housing built 1990 through 2000) and that “snapshot” may change over time.
  - In short, there are limitations to the “Quick Guide” data and humility is in order whenever dealing with demographics. At the same time, the “Quick Guide” represents the most comprehensive and current compilation of arms-length data concerning the demographic profile of new housing in New Jersey. The “Quick Guide” also benefited from extensive peer review from knowledgeable professionals from the public and private sectors in New Jersey.
- For easy use, the “Quick Guide” is organized into two parts. The first describes the demographic data and presents illustrative applications. The second part contains the New Jersey household size, school-age children, and public school children multipliers.
  - Readers interested in the *total number of persons and persons by age group* (0–4, 5–17, 18–34 and so on) for different type, size, value and tenure of newly built (1990–2000) New Jersey housing should consult table II-1 (page 27) in Part Two of the “Quick Guide.”
  - Readers interested in the *school age children (SAC) and the SAC by school level* (elementary, junior high, and high school) for different type, size, value, and tenure of newly built New Jersey homes should consult table II-2 (page 30) in Part Two of the “Quick Guide.”
  - Readers interested in the *public school children (PSC) and the PSC by school level* for different type, size, value, and tenure of newly built New Jersey housing should consult table II-3 (page 33) in Part Two.

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<sup>6</sup> Data presented is for the 90 percent confidence interval, or the expected results in 9 out of 10 cases.

<sup>7</sup> A more detailed version of the current study *New Jersey Demographic Multipliers: The Profile of the Occupants of Residential and Nonresidential Development*, to be published by Rutgers University, contains the sample size, standard error, 90 percent confidence interval, and other statistics for the New Jersey multipliers.



- Readers interested in the exploratory data on the demographics of the occupants of *transit-oriented developments* (public school children) and *affordable housing* (household size, school age children, and public school children) should consult table I-8 (page 22), and table I-9 (page 23) respectively.
- The meaning and application of the data contained in the above-indicated tables will be enhanced by reviewing the background information and examples described in Part One of the “Quick Guide.”

## **PART ONE**

### **RESIDENTIAL DEMOGRAPHIC MULTIPLIERS: DESCRIPTION AND ILLUSTRATIVE APPLICATIONS**

#### **INTRODUCTION**

Projecting the fiscal and other impacts from development, establishing infrastructure standards to accommodate growth, calibrating off-tract developer charges, and numerous other analyses are dependent upon knowing the number of persons and school children found in residential structures. The numbers and profile of these people in different housing categories are referred to in this study as residential *demographic multipliers*.

Residential multipliers include data on the two principal users of local services: people, for municipal services; and school children, for educational needs. The multipliers for household size represent the average number of persons living in a housing unit; the figures for school children quantify the number of persons of elementary and secondary school-age (school-age children multiplier) and the subset of school-age children attending public schools (public school children multiplier). For instance, if a housing unit's demographic multiplier is 2.50 for household size and 0.50 for public school children, then 100 such homes can be expected to contain 250 persons, including 50 publicly educated pupils.

The current study by Rutgers University provides a "Quick Guide" to New Jersey statewide residential demographic multipliers for: *household size (HS)*, *school-age children (SAC)*, and for SAC attending public schools, or *public school children (PSC)*. These multipliers are derived from the federal decennial 2000 *Census of Population and Housing for New Jersey*, focusing on newer built units in this state. (New Jersey housing constructed 1990-2000 monitored by the 2000 census.) The specific census information that is tapped is the 5 percent Public Use Microdata Sample (PUMS) because only PUMS allows the detailed crosstabulation of demographic information detailed shortly.

The current "Quick Guide" summarizes the results of a larger monograph<sup>8</sup> that will also be published by Rutgers University. The larger monograph contains demographic multipliers differentiated by geographic region of New Jersey (north, central, and south), nonresidential multipliers (i.e., the number of workers per 1,000 square feet of office, retail, and other business uses), statistical detail on the multipliers (e.g., sample size, standard error, and confidence interval), and other subjects (e.g., 1990 to 2000 changes in the multipliers) not covered here. The current "Quick Guide" thus synthesizes the essential, current statewide residential findings from the forthcoming Rutgers monograph and presents the residential information in a readily usable format.

The "Quick Guide" is organized into two parts. The first describes the demographic data and presents illustrative applications. The second part contains the New Jersey HS, SAC, and PSC demographic multipliers.

#### **RESIDENTIAL DEMOGRAPHIC MULTIPLIERS FOR NEW JERSEY: OVERVIEW**

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<sup>8</sup> *New Jersey Demographic Multipliers: The Profile and Occupants of Residential and Nonresidential Development* will be published by the Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey.

The statewide New Jersey residential demographic multipliers include the following data fields and organization.

1. *Household Size (HS)*: the total persons per housing unit.
2. *Age distribution of the household members* organized into the following age categories: 0–4, 5–17, 18–34, 35–44, 45–54, 55–64, 65–74, 75+.
3. *Total school-age children (SAC)* or number of persons in the household of school age, defined as those 5 to 17 years old. (The SAC is the same as the number of household members in the 5–17 age category.)
4. *Total public school children (PSC)*, or the SAC who attend public schools.
5. *The SAC and PSC by school level and grade group* organized as follows: *elementary* (kindergarten–grade 6), *junior high school* (grades 7–9), and *high school* (grades 10–12).

The demographic fields shown above are differentiated by *housing type*, *housing size*, *housing price*, and *housing tenure*—four variables that have been found by Rutgers to be associated with statistically significant differences in the HS, SAC, and PSC, albeit sometimes these differences are measurably modest in scale. The multipliers are calculated for new housing, here defined as New Jersey housing units enumerated in the 2000 census and built from 1990–2000.

The housing or structure types include: *single-family detached*; *single-family attached*, sometimes referred to as townhouses or townhomes; *larger (5-or-more-unit)*, *multifamily buildings*, such as garden apartments or stacked flats; and *smaller multifamily structures (2 to 4 units)*, such as a starter two-family home. (See page 26 for a formal census definition of each of these housing types.) As the 2000 census, the source for the residential multipliers, does not have information on the stories in a housing structure (this was last available in the 1980 census), multiplier presentations cannot disaggregate multifamily housing into garden, mid-rise, and high-rise categories.

Housing-unit size is measured by the number of bedrooms, and data are presented for housing units ranging from 0 (*studio*) to 5 bedrooms. According to the census, this housing feature is defined as “the number of rooms that would be listed as bedrooms if the house [or] apartment...were listed on the market for sale or rent even if these rooms are currently used for other purposes.”<sup>9</sup> There is an association between housing type and bedroom number, and the demographic multiplier tables in Part Two present the common configurations for each housing type. For instance, demographic data are shown for 0-and-1-bedroom multifamily units and not 4-5 bedroom such homes because the multifamily housing tends to be built with fewer rather than more bedrooms. The opposite is the case for single-family detached homes; in this instance, data are presented for 2-to 5-bedroom units as opposed to 0-1 bedroom units because detached housing is typically built with greater rather than fewer bedrooms.

In order to maintain sufficient sample size and reliability in the estimates, Part Two sometimes groups selected housing size categories. This is typically done for the less prevalent size groups for as these are less common, there are fewer of them to sample. A small sample size, in turn, would result in an average multiplier with an unacceptably low statistical reliability. For example, as there

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<sup>9</sup> U.S. Census Bureau. *Files: Census 2000, Public Use Microdata Sample*. (2003). p. B-52.

are few studio (0-bedroom) multifamily units, this housing category is grouped with the 1-bedroom multifamily units in order to form an aggregate 0-1 bedroom group for which we have more robust sample size and statistical reliability. As there are fewer 5-bedroom single-family detached homes, we group 4- and 5-bedroom detached units.

Housing is additionally classified by tenure: *owned* or *rental*. According to the census, a “housing unit is occupied if the owner, or co-owner lives in the unit even if it is mortgaged or not fully paid for. All occupied housing units that are not owner occupied, whether they are rented for cash rent or occupied without payment of cash rent, are classified as renter occupied.”<sup>10</sup>

There is a further differentiation in the demographic profiles by housing value or rent. The census definitions for “value” and “rent” are shown on page 26. With regard to the latter, the current study utilizes the “gross rent” (rent with utilities) rather than the “contract rent.” (See page 26 for rent definitions). If a housing unit is rented, the unit’s housing value is estimated at 100 times the gross monthly rent.

The 2000 census-indicated values and gross rents are updated to 2006 using a residential price inflation index (“median price of single-family homes by state”) available from the Federal Housing Finance Board (FHFB). The FHFB’s data are for 2000 through 2004. Housing values for 2006 were determined by extending the FHFB’s indicated housing price change for 2003-2004 to both 2004-2005 and to 2005-2006.

The demographic profiles by 2006 housing values and gross rents are organized following a tripartite classification: *housing priced below the median, housing priced above the median, and all value housing*. The above housing value terms are just as they are stated. “Housing priced below the median” should *not* be confused with “affordable” or *Mount Laurel* housing as it is sometimes referred to in New Jersey. “Housing priced above the median” is *not* synonymous with what is sometimes referred to as “market-rate housing” (to contrast the “market-rate” from the “affordable” or “*Mount Laurel*” categories).

To illustrate, the median priced 3-bedroom New Jersey townhouse as of 2006 was valued at \$267,744. Three-bedroom townhouses priced below \$267,744 would be in the “below median” category, while those priced above \$267,744 would be in the “above median” category. To reiterate, these price break points have no relationship to “affordable” or “*Mount Laurel*” versus market-priced housing. (Table I-9 in this study separately contains exploratory data on “affordable” or “*Mount Laurel*” homes.)

All of the above described data are found in three tables in Part Two. Table II-1 contains the household size demographic multipliers, (and the breakout of residents by age cohort) and Tables II-2 and II-3 have the school-age children and public school-age children demographic multipliers respectively.

In summary, then New Jersey statewide residential demographic data are organized as follows:

#### Table I-1

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<sup>10</sup> U.S. Census Bureau. *Files: Census 2000, Public Use Microdata Sample*. (2003). p. B-63.

## Organization of the New Jersey Residential Demographic Multipliers

Housing Structure-Type/ Bedrooms/ Value/Tenure-Own & Rent *	Household Size (Table II-1)	School-Age Children (Table II-2)	Public School Children (Table II-3)
<i>Single-family Detached- Own &amp; Rent <sup>a</sup></i>			
2 Bedroom	27 <sup>b</sup>	30 <sup>b</sup>	33 <sup>b</sup>
3 Bedroom	27	30	33
4-5 Bedroom	27	30	33
<i>Single-Family Attached- Own &amp; Rent <sup>a</sup></i>			
2 Bedroom	27	30	33
3 Bedroom	27	30	33
4-5 Bedroom	27	30	33
<i>Larger (5+ units) Multifamily- Own &amp; Rent <sup>a</sup></i>			
0-1 Bedroom	27	30	33
2 Bedroom	27	30	33
3 Bedroom	27	30	33
<i>Larger (5+ units) Multifamily- Own <sup>a</sup></i>			
0-1 Bedroom	28	31	34
2 Bedroom	28	31	34
3 Bedroom	28	31	34
<i>Larger (5+ units) Multifamily—Rent <sup>a</sup></i>			
0-1 Bedroom	28	31	34
2 Bedroom	28	31	34
3 Bedroom	28	31	34
<i>Smaller (1-4 unit) Multifamily- Own &amp; Rent <sup>a</sup></i>			
0-1 Bedroom	28	31	34
2 Bedroom	28	31	34
3 Bedroom	28	31	34
<i>All Housing Types-Own <sup>a</sup></i>			
0-1 Bedroom	29	32	35
2 Bedroom	29	32	35
3 Bedroom	29	32	35
4-5 Bedroom	29	32	35
<i>All Housing Types-Rent <sup>a</sup></i>			
0-1 Bedroom	29	32	35
2 Bedroom	29	32	35
3 Bedroom	29	32	35
4-5 Bedroom	29	32	35

<sup>a</sup> Differentiated by 3 housing value categories: all values, below median value, and above median value. Housing priced at below the median value is not synonymous with “below market” or “Mount Laurel” units. Housing priced at above the median value is not synonymous with “market priced” units. See table I-9 for exploratory data on the demographic profile of low- and moderate-income households in New Jersey. The indicated dollar figures for New Jersey housing values in this study are as of 2006.

<sup>b</sup> Figure refers to page number

Source: See text.

Statistical analysis of the data in tables II-1 through II-3 finds the following. In general, larger units (in terms of bedrooms), have statistically significant more household members and school children (both SAC and PSC) and housing types that typically are larger (in terms of bedrooms), such as single-family detached homes, are statistically more population-intensive than their counterparts usually constructed with a smaller number of bedrooms, such as multifamily units.

While housing size and relatedly housing type are the primary characteristics associated with the statistically significant variation in the number of people and school children generated by a given housing unit, there are other influences. There is a statistically significant relationship between housing price and population intensity (HS, SAC, and PSC) with the population yield somewhat higher in less expensive units of a given size and type and somewhat lower in their more expensive counterparts. Housing tenure, whether a unit is owned or rented, also is statistically associated with the demographic profile. In general, larger (2 or more bedroom) rental housing of all housing types are relatively more population intensive (HS, SAC, and PSC) than the owned housing counterparts. In contrast, smaller (0-1 bedroom) rental housing of all housing types tends to contain statistically fewer household members and school children than comparable owned housing.

The detailed statistical analysis related to the above findings is available from the authors. In brief, a commonly applied statistical application, OLS (ordinary least squares) regression, was applied to examine what variables are associated with statistically significant differences in the demographic profile (HS, SAC, and PSC) controlling for the other variables (e.g., examining the association of housing type, controlling for housing size and tenure). That study revealed that housing type, housing size, housing value, and housing tenure are all associated with statistically significant variation in demographic profile (HS, SAC, and PSC). In terms of explanatory power of variation in demographic profile, the number of bedrooms is the most powerful, then building type, building value, and then housing tenure, but there is not much difference in explanatory power among the latter three variables.<sup>11</sup>

The manner in which the data in Part Two of the “Quick Guide” is presented is guided by the above statistical work<sup>12</sup>. Thus, tables II-1, II-2, and II-3 are organized by housing type, housing size, housing value, and housing tenure because statistically significant variations were found to be associated with the above variables.

It is important to differentiate, however, between a statistically significant variation and a difference of practical import. The former refers to a difference that statistically would not likely be due to chance; the latter is framed contextually and may vary by differing users, applications, and components of the demographic data.

For instance, the number of public school children in a 0-1 bedroom home of below-median value in a 5+ unit building is 0.07 for rental tenure versus 0.17 for ownership tenure—a statistically significant variation by tenure that for most observers would be of practical import as well. However, the finding that a 3-bedroom single-family detached home of above median value has a household size of 2.91 versus a household size of 3.04 for its below median counterpart, while significant statistically, may for many analysts not be of practical import.

## **ILLUSTRATIVE NEW JERSEY RESIDENTIAL DEMOGRAPHIC MULTIPLIERS**

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<sup>11</sup> To compare the relative explanatory power of different variables, we used a variant of the stepwise regression. Specifically, we excluded each variable (or set of variables) from the regression, one at a time, and checked by how much the adjusted  $R^2$  declined, as a result. The variable whose exclusion results in the largest drop in the adjusted  $R^2$  has the biggest explanatory variable.

<sup>12</sup> Statistical considerations guided other aspects of the current study, such as using a three tier taxonomy of housing value (above the median, below the median, and all values) instead of a five category grouping of housing value. The five-tier value group was rejected because it yielded multipliers with an unacceptably high error margin.

Following the background presented above, it is opportune to examine in an illustrative fashion some of the year 2000 data contained in Part Two.

How many persons and school children are found in a 2-bedroom townhouse (single-family attached unit) versus a 4-5 bedroom single-family detached (SFD) home in New Jersey? Since no price is specified for these respective units, the analyst would use the “all value” data contained in tables II-1 through II-3 in Part Two and would ascertain the following:

**Table I-2**  
**Illustrative Overall Demographic Data for Townhouse and Detached Housing (2000)**

<i>Housing Category</i>		
Type	Townhouse	Single-Family detached (SFD)
Size (bedrooms)	2	4-5
Tenure	Own and rent	Own and rent
Price	All value	All value
<i>Overall Demographics</i>		
Household size	1.997	3.774
School-Age Children	0.156	1.077
Public School Children	0.126	0.872

*Source:* Tables II-1 through II-3

In other words, 100 of the 2-bedroom townhouses would generate on average about 200 persons of whom approximately 16 would be of school age, with 13 pupils attending the public schools. For the 4-5 bedroom single-family detached home (SFD), the 100 units would generate about 377 persons, of whom 108 would be of school age, 87 attending public schools.

Of the public school children counts indicated above (table I-2), how many are likely to attend elementary (kindergarten-6<sup>th</sup> grade), junior high (7<sup>th</sup>-9<sup>th</sup> grades), and high school (10<sup>th</sup>-12<sup>th</sup> grades)? From table II-3 in Part Two, the following school and grade level multiplier data for public school children is available:

**Table I-3**  
**Illustrative Detailed (Public School Children) Demographic Data for Townhouse and Detached Housing (2000)**

<i>Housing Category</i>				
Type	Townhouse		Single-family detached	
Size (bedrooms)	2		4-5	
Tenure	Own and rent		Own and rent	
Price	All value		All value	
<i>Detailed Demographics</i>				
Public School Children	<i>Multiplier</i>	<i>%</i>	<i>Multiplier</i>	<i>%</i>
Elementary (K-6)	0.081	(64.3)	0.549	(62.3)
Junior High (7-9)	0.021	(16.7)	0.183	(21.0)
High School (10-12)	0.024	(19.0)	0.140	(16.7)
All	0.126	(100.0)	0.872	(100.0)

*Source:* Table II-3

Put another way, of the 13 public school children from the 100 2-bedroom townhouses, 8, 2, and 3 pupils would likely be found in elementary, junior high, and high school, respectively. For the 100

4-5 bedroom detached homes, generating 87 public school children, the pupil distribution for the three school categories can be expected to be 55, 18, and 14 students respectively.

What about the age distribution of all the persons generated by the townhouses versus the detached homes? From table II-1 in Part Two the following age-cohort information can be assembled:

**Table I-4**  
**Illustrative Detailed (Age Distribution) Demographic Data for Townhouse and Detached Housing (2000)**

Housing Category				
Type	Townhouse		Single-family detached	
Size (bedrooms)	2		4-5	
Tenure	Own and rent		Own and rent	
Price	All value		All value	
Detailed Demographics				
Age Distribution	<i>Multiplier</i>	<i>%</i>	<i>Multiplier</i>	<i>%</i>
0-4	0.150	(7.5)	0.442	(11.7)
5-17	0.156	(7.8)	1.077	(28.5)
18-34	0.557	(28.0)	0.539	(14.3)
35-44	0.366	(18.3)	0.998	(26.4)
45-54	0.265	(13.3)	0.492	(13.0)
55-64	0.220	(11.0)	0.146	(3.9)
65-74	0.186	(9.3)	0.063	(1.7)
75+	0.097	(4.9)	0.038	(1.0)
All	1.997	(100.0)	3.774	(100.0)

Source: Table II-1

From the above (table I-4) data, the analyst could estimate that of the 200 persons from the 100 2-bedroom townhouses, about 15 ( $200 \times 0.075$ ) would be four years of age or under, while of the 377 population from the 100 detached 4-5 bedroom homes, 44 persons ( $377 \times 0.117$ ) would fall into the youngest age cohort. The townhouses would contain relatively more persons of retirement age—65 years or older—than their detached counterparts. Of the 200 persons from 100 townhomes, 14.2 percent<sup>†</sup> or 28 would be expected to be at least 65 years old as against only 2.7 percent<sup>‡</sup> or 10 persons for the single-family detached homes values.

Knowledge of the housing units' price (all home values shown are as of 2006) can refine the selection of the appropriate residential demographic multipliers from Part Two. If the 2-bedroom townhouses were priced above \$226,552, then as is evident from tables II-1 through II-3, the "above median" values would be selected; below \$226,552, the "below median" 2-bedroom townhouse values would be most appropriate. For the 4-5 bedroom single-family detached home, units priced below \$576,679 would fall into the "below median" group while their counterparts priced above \$576,679 would fall into the "above median" category. Price may affect the demographic profile as the following illustration for the 2-bedroom townhouse example indicates. In this instance, the higher priced townhomes have fewer persons, school age, and public school children than their lower priced counterparts.

**Table I-5**

<sup>†</sup> Combines 9.3 percent and 4.9 percent for the 65-74 and 75+ age cohorts respectively for the 2-bedroommm townhomes (see table I-4).

<sup>‡</sup> Combines 1.7 and 1.0 percent for 65-74 and 75+ age cohorts respectively for the 4-bedroom single-family detached homes (see table I-4).



**Illustrative Overall Demographic Data for Townhouses  
Differentiated by Housing Value (2000)**

<i>Housing Category</i>			
Type	Townhouse	Townhouse	Townhouse
Size (bedrooms)	2	2	2
Tenure	Own & Rent	Own & Rent	Own & Rent
Price	All Values	Below Median Value	Above Median Value
<i>Overall Demographics</i>			
Household size	1.997	2.068	1.914
School-age children	0.156	0.206	0.096
Public school children	0.126	0.164	0.081

*Source:* Tables II-1 through II-3

For the multifamily homes (i.e., 5+ unit structures) information on price as well as tenure would guide the analyst as to which multipliers to use in Part Two. Evident from the illustrative overall demographic figures shown in table I-6 is that the population yield is lower for owned more expensive 2-bedroom multifamily homes than for their rented less expensive counterparts

**Table I-6  
Illustrative Overall Demographic Data for Multifamily Units (2-bedroom)  
Differentiated by Housing Tenure and Value (2000)**

<i>Housing Category</i>				
Type	Multifamily	Multifamily	Multifamily	Multifamily
Size	2 bedroom	2 bedroom	2 bedroom	2 bedroom
Tenure	Rent	Own	Rent	Own
Price	Above median	Above median	Below median	Below median
<i>Overall Demographics</i>				
Housing size	2.107	1.844	2.493	1.771
School-age children	0.165	0.105	0.478	0.131
Public school children	0.115	0.092	0.432	0.101

*Source:* Tables II-1 through II-3

For the 0-1 bedroom multifamily homes, higher price remains associated with a lower population impact, however, in this instance, tenure has an opposite impact as it is the rental 0-1 bedroom homes which tend to generate relatively fewer persons, school-age, and public school children (table 1-7).

**Table I-7  
Illustrative Overall Demographic Data for Multifamily Units (0-1 Bedroom)  
Differentiated by Housing Tenure and Value (2000)**

<i>Housing Category</i>				
Type	Multifamily	Multifamily	Multifamily	Multifamily
Size	0-1 bedroom	0-1 bedroom	0-1 bedroom	0-1 bedroom
Tenure	Rent	Own	Rent	Own
Price	Above median	Above median	Below median	Below median
<i>Overall Demographics</i>				
Housing size	1.644	1.682	1.370	1.702
School-age children	0.057	0.069	0.083	0.167
Public school children	0.051	0.051	0.069	0.167

*Source:* Tables II-1 through II-3

The above type of data is clearly of interest to planners, educators and other public officials, as well as the New Jersey public at large. The Part Two tables thus provide a handy and pertinent reference as to “who lives in New Jersey housing.” That resource is the basis for numerous interrelated analytic applications.

## **APPLICATIONS OF THE NEW JERSEY RESIDENTIAL DEMOGRAPHIC MULTIPLIERS**

### **Fiscal Impact of Development**

This assessment compares the public costs and public revenues associated with growth. If costs exceed revenues, a deficit is incurred; if revenues exceed expenditures, a surplus is generated. There are different techniques for conducting a fiscal-impact assessment such as the per capita, case study, and comparable community methods. All, however, begin with the determination of the population generated by growth—principally people, school-age children, and public school children—an analysis that depends on the demographic multipliers.

A fiscal impact analysis may be required of New Jersey developers. The fiscal consequences of growth may more generally be considered by New Jersey communities planning their future. Ideally, fiscal effects would be only one of many evaluative criteria; others include environmental sustainability, quality design, satisfying affordable housing needs, and considering traffic, and numerous other development impacts.

The fiscal impact of growth in a given community is best viewed on a comprehensive scale that includes all or much of future anticipated development as opposed to only considering one component of the larger picture. It is in this macro view that land uses should be considered. Communities in New Jersey as well as the nation have sometimes “overzoned” for nonresidential development while they have “underzoned” for housing, especially attached units in general and affordable housing in particular.

Hopefully the multipliers considered in the “Quick Guide” will address some of the erroneous assumptions and misconceptions that underlie the above described “ratables chase.” First, housing, especially attached units, provides far fewer residents and especially public school children than is commonly assumed. Second, even if certain housing produces a high demographic yield and results in a fiscal deficit, that shortfall may not be very significant in a community-wide perspective and/or the shortfall can be offset by other fiscally positive development in the community, both residential as well as nonresidential. *More fundamentally, zoning should not be driven by demographics and*

*fiscal impact*. The *Mount Laurel* mandate in New Jersey requires communities to shoulder a measure of the region's housing need and even in the absence of *Mount Laurel*, smart growth exemplifies the imperative of communities providing for a range of housing and a variety of land uses.

### **Projecting Demand for Public Employees**

Many public jurisdictions in New Jersey relate their public staffing requirements at least in part, to the size of the population being served. Examples include teacher-student ratios and the number of police needed per 1,000 population. As the demographic multipliers provide a basis for calculating the population introduced by development, they are invaluable for anticipating the public employee demands from growth. That information can guide future public hiring needs as well as inform fiscal impact and other calculations.

### **Calculating Impact Fees**

Capital improvements, such as street, utility, and drainage systems, were historically provided by government and paid for by all taxpayers. In recent years, however, there has been some shift so that more of the infrastructure engendered by growth is provided by and paid for privately by developers and the consumers of housing and commercial space. One means of accomplishing this is through the imposition of exactions. Whether termed "impact fees," "proffers," "off-tract contributions," "developer agreements," or other nomenclature, these generic charges all refer to exactions placed on new growth to fund a proportionate share of attendant infrastructure costs. These charges are prevalent in such sunbelt states as California, Florida, and Virginia, and are circumscribed in New Jersey (by the Municipal Land Use Law) and other jurisdictions.

There are many legal, economic, equity, and other issues involved with respect to development exactions. One of the most challenging and basic is the determination of the "rational nexus" between growth and attendant capital improvements. Rational nexus refers to the linkage between development and infrastructure—that a given measure of growth requires a specific increment of capital improvements and spending. An exaction on growth should be proportional to its effect on infrastructure.

In the formulation of impact fees and similar charges, rational nexus and the underlying concept of proportional charges, is often operationally estimated through reference to the residential demographic multipliers. Since capital improvements are related to the demands posed by population, development that introduces more persons necessitates greater amounts of infrastructure and is charged more while development that is not as population-intensive is charged less. In turn, the specification of persons by development type is identified by the residential multipliers.

### **REFINING THE NEW JERSEY RESIDENTIAL DEMOGRAPHIC MULTIPLIERS**

The data in Part Two is a baseline reference that will need to be updated and refined over time, as well as tested against real-world experience. With the help of the public sector in New Jersey, including municipalities, school districts and counties, as well as state's planning and development communities, the authors of the current "Quick-Guide" have begun the updating, refinement, and testing described above. The full results to date will be detailed in the forthcoming monograph *New Jersey Demographic Multipliers: The Profile of Occupants of Residential and Nonresidential Development* to be published by Rutgers University. As a preview of the larger effort, we conclude the current "Quick Guide" with the following major findings.

Comparing the census-based demographic multipliers to the actual school children impacts of built New Jersey projects supports, the real-world veracity of the census information. This exploratory test proceeds as follows:

1. Through the Office of Smart Growth, New Jersey Builders Association, New Jersey county planning offices, and other contacts, the Rutgers research team identified a sample of recently built (approximately 1990 to 2000) attached housing developments in New Jersey. Rutgers focused on attached as opposed to detached homes because the greatest controversy concerning the “real-world” demographic impact concerns the former units.

2. Rutgers then sought housing information (type, size, tenure, and value) for these developments. The research team was successful in obtaining all or most of these housing descriptors for 61 developments scattered throughout New Jersey comprising a total of 14,191 housing units.

3. In tandem, information was obtained from the developers-owners-managers of these 61 projects on the public school children living in these developments. (Rutgers focused on the public school children demographic for that, much more so than household size, is a subject of considerable controversy.) That public school children information was then cross-checked with the local school districts responsible for providing elementary and secondary education to the 61 developments. At times, there was one responsible (kindergarten -12<sup>th</sup> grade) school district while in other cases, responsibility was divided between two school districts such as a kindergarten - 6<sup>th</sup> grade, and 7<sup>th</sup> grade -12<sup>th</sup> grade arrangement. All the host school districts were called; some, however, could or would not provide the requested information. Rutgers was successful in obtaining the actual public school children from the host school districts in about 40 percent of the cases (for 26 developments containing 7,542 housing units of the total 61 developments with an aggregate of 14,191 housing units).

4. From the school district and/or developer sources indicated above, it was found that the 14,191 housing units contained 1,975 public school children or an overall public school demographic multiplier of 0.14.

5. Applying the census-based public school children demographic multipliers for the housing units classified by housing type, size, tenure, and value (as best as the research team could make that differentiation), yields an estimate of 1,941 school-age children. Thus, the actual public school children (1,975) and the estimated public school children (1,941) are in reasonable approximation of one another. The above test is a start of what should be an ongoing procedure. It does however provide some “real-world” evidence that the PUMS-based demographic multipliers contained in Part Two of this study are reasonable.

Rutgers has also developed “real-world” data for New Jersey transit-oriented developments (TODs). The latter, an important component of smart growth, offers many advantages, such as reducing dependence on the automobile. Preliminary evidence suggests that TODs generates few public school children, thus minimizing the impact on local school districts. Our TOD analysis proceeded as follows:

1. From the Alan M. Voorhees Transportation Center, the Office of Smart Growth, and other sources, Rutgers identified 10 constructed and occupied TODs in New Jersey (see Table I-8). The 10 projects contained 2,183 housing units.

2. Rutgers contacted the elementary and secondary school districts serving these 10 projects and found they contained a total of 47 public school children. That represents a public school children multiplier of .02 (47/2,183). In other words, every 100 housing units in a TOD generated only about 2 public school children.

*The public school children multipliers for the TOD projects are substantially lower than those indicated by the PUMS for average New Jersey housing. Based on the PUMS, this analysis would have projected that the 10 New Jersey TODs would have generated 285 public school children. That is far higher than the TODs' actual public school children yield of 47. The TODs' actual public school children generation is about one-sixth the number of public school pupils from homes of similar type, size, tenure, and value, yet are not specifically located near transit.*

While this analysis is preliminary and one must continue to monitor the demographics of TODs over time, the above-cited evidence suggests that TODs generate relatively few public school children. That is of interest to the host communities containing such projects because few public school children from TODs means that the TODs pose only modest demand on local school districts.

Rutgers has also gathered exploratory data on the demographics of affordable housing. By way of background, New Jersey communities have an obligation to provide affordable housing, often referred to after the state Supreme Court decision that enunciated that obligation as *Mount Laurel* housing. *Mount Laurel* units may be found in stand alone entirely affordable housing developments or more often are contained within larger developments that include both market-priced and below-market priced homes.

What is the demographic profile of the households living in new *Mount Laurel* housing units? There is no definitive answer to that query because there are no available data on the occupants of *Mount Laurel* housing. However, to begin to provide some information on the subject, the following demographics are presented.

From the 2000 Public Use Microdata Sample for New Jersey, it is possible to identify the demographic profile of low- and moderate-income (LMI) households in the state. Table I-9 presents that information. To illustrate, it indicates that all LMI New Jersey households on average contained 2.35 persons and 0.50 school-age children, of whom almost all (0.45) attended public schools. Table I-9 provides further detail. For instance, the average number of public school children for New Jersey LMI households living in owned units in 5+ unit structures as of the 2000 census was 0.06, 0.18, and 0.54 for 1-bedroom, 2-bedroom, and 3-bedroom units respectively. For rental homes (in 5+ unit structures), the LMI households on average would contain 0.14, 0.62, and 1.27 public school children from the 1-bedroom, 2-bedroom, and 3-bedroom units, respectively. *It is important to realize, however, that the occupants of Mount Laurel housing may not mirror the New Jersey LMI population profile.* For instance, it is possible that only the more mobile, more knowledgeable or more relatively affluent LMI households will avail themselves of the *Mount Laurel* housing being offered in different communities throughout the state. Council on Affordable Housing occupancy standards (see table I-9) also bear on the demographic profile of *Mount Laurel* housing units. *Thus the data in table I-9 must be viewed as only a starting basis for framing the demographic profile of Mount Laurel housing.*

While keeping in mind the above caveat, the table I-9 data can inform the demographic impact of affordable or mixed-income housing. For instance, how many public school children can be expected from 100 *Mount Laurel* townhomes, half two-bedroom and half three-bedroom? From the exploratory data in table I-9, the answer is 55 public school children ( $[50 \times 0.32] + [50 \times 0.78]$ ).

How many public school children can be anticipated from a 100 unit inclusionary housing development in New Jersey (88 market-priced homes and 12 affordable homes) comprised of for-sale condominiums in 5+ unit structures? The answer as indicated below (table I-10) is 19 public school children, about 3 coming from the affordable homes.

**Table I-8**  
**Public School Children Generation From Selected Transit-oriented developments (TODs) In New Jersey**

<i>Project Profile</i>	<i>Size</i>	<i>Pupil Generation Pupil Multipliers</i>			
<i>Project Name</i>	<i>Location</i>	<i>Tenure</i>	<i>Number of Units</i>	<i>Public School Children</i>	<i>Public School Children Multiplier<sup>a</sup></i>
1. Jacobs Ferry	West New York	Rental	254	0	0.00
2. Riverwatch	New Brunswick	Rental	200	1	0.01
3. Chancery Square	Morris-town	Rental	131	1	0.01
4. Franklin Square	Metuchen	Rental	105	10	0.10
5. Gaslight Commons	South Orange	Rental	200	6	0.03
6. Riverbend I	West New York	Rental	302	5	0.02
7. Riverbend II	West New York	Rental	212	4	0.02
8. Riverside West	West New York	Rental	344	5	0.01
9. Harbor Place	West New York	Rental	20	9	0.45
10. Highlands at Plaza Square	New Brunswick	Rental	415	6	0.01
<b>Total</b>			<b>2,183</b>	<b>47</b>	<b>0.02</b>

<sup>a</sup> Equals public school children divide by the number of housing units.

*Source:* The project profile and project size information was derived from the developers of the indicated TODs. The public school children data from each TOD was obtained by contacting the public school district (s) serving the respective TODs.

**Table I-9**  
**Household Size, School-Age Children, and Public School Children For Low- and Moderate-Income Households (LMI) In New Jersey (2000)**

	Total Persons	School- Age	Public School
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		Children	Children
All Housing Types and Bedrooms	2.35	0.50	0.45
Single-Family, Detached			
2BR	1.95	0.24	0.21
3BR	2.49	0.51	0.46
4BR	3.07	0.83	0.73
Single-Family, Attached			
2BR	2.09	0.35	0.32
3BR	3.05	0.86	0.78
5+ Units, Own			
1BR	1.37	0.07	0.06
2BR	1.76	0.21	0.18
3BR	2.51	0.6	0.54
5+ Units, Rent			
1BR	1.61	0.16	0.14
2BR	2.76	0.68	0.62
3BR	3.82	1.37	1.27

Source: U.S. Census of Population and Housing, Public Use Microdata Sample, 2000

*Note:* The Council on Affordable Housing (COAH) Uniform Housing Affordability Controls (UHAC) indicate the following occupancy standards: “A studio shall be affordable to a one person household; a one bedroom-unit shall be affordable to a one and one-half person household; a two bedroom unit shall be affordable to a three person household; a three bedroom unit shall be affordable to a four and one-half person household; and a four bedroom unit shall be affordable to a six person household.” UHAC further indicates that “to the extent feasible...the administrative agent shall strive to: Provide an occupant for each unit bedroom; Provide children of different sex with separate bedrooms; and prevent more than two persons from occupying a single bedroom.” While these standards bear on the relationship between housing unit size (bedrooms) and household size, we do not have empirical evidence on the number of persons found in different size COAH units. For instance, a “smaller” household (e.g., a 3-person household in a 3-bedroom unit) may be able to afford such a home with a larger down payment.

**Table I-10**  
**Illustrative (Public School Children) Demographic Impact From a 100 Unit Inclusionary**  
**Housing Development (For-sale homes in 5+ unit structures)**

Housing Type/Size	Number of Housing Units	Public School Children per Unit	Expected Public School Children
5+ Units Own			
<i>Market Housing</i>			
2-bedroom	44	.09	3.96
3-bedroom	44	.28	12.32
Subtotal	88		16.28
<i>Affordable Housing</i> <sup>a</sup>			
1-bedroom	3	.06	0.18
2-bedroom	6	.18	1.08
3-bedroom	3	.54	1.62
Subtotal	12		2.88
Project total	100		19.16, say 19

<sup>a</sup> Above median value

Source: Tables I-9 and II-3.

## THE CONTINUED NEED FOR LOCAL ANALYSIS

The demographic multipliers contained in this document provide important statewide average benchmark data derived from the best demographic source for New Jersey—the decennial census. The statewide data can only go so far, however, in accurately predicting the actual number of growth-engendered residents and pupils in a specific community. Optimally the statewide benchmark data will be supplemented by local case study analysis of the actual population impacts from built projects comparable in character (housing type, housing size, housing price, and housing tenure) and location (immediate community, county, or larger market area) to the development being examined.

Case study investigation is admittedly challenging because information on a given project may be difficult to obtain in terms of the number, type, size, and price of the housing units and securing credible arms-length information on a project’s actual demographic impacts, such as from a local school district, is yet more difficult to secure. Yet, case studies can be effected; they are in essence what was accomplished by the nascent Rutgers testing previously described. Further, case studies enhance the “real-world” credibility of demographic study and may reveal local contextual factors, such as quality of the local school system, or particular geography (e.g., proximity to Manhattan), that may bear on the demographic impacts from development. In short, the optimal strategy is to combine this document’s benchmark data with local case study investigation.

## CONCLUSION

In summary, the 2000 census provides the best information concerning “who lives in New Jersey housing” and the current publication analyzes that data to provide a “Quick Guide” as to the statewide demographic profile of recently built New Jersey dwellings. Residential demographic multipliers are presented for household size, school-age children, and public school children differentiated by housing type, size, value, and tenure. In addition, the age distribution of the household members contained within newer built dwellings in New Jersey is presented as well. Rutgers has further developed exploratory data on the public school children impact of transit-oriented development (found to be negligible) and likewise has assembled exploratory data on the



demographics of affordable homes (found to be less than is commonly assumed). Additionally, Rutgers has begun what must be an ongoing process of testing the demographic multipliers against real-world experience; the study's findings to date are that the census-based multipliers provide a reasonably accurate depiction of the demographic impacts from residential development. That depiction will optimally be supplemented by further case study analysis. All of the above would not have been possible without the assistance of planners, government officials, and developers throughout New Jersey and Rutgers hopes to continue this collaboration to refine our knowledge of "who lives in New Jersey housing" in the future.

## PART TWO

### NEW JERSEY STATEWIDE RESIDENTIAL DEMOGRAPHIC MULTIPLIERS

#### Definitions

(Definitions are from the US Census Bureau, *File: Census 2000, Public Use Microdata Sample, 2003.*)

<i>Terms</i>	<i>Definition/Comment</i>
<i>Bedrooms (BR)</i>	The number of rooms that would be listed as bedrooms if the house [or] apartment...were listed on the market for sale or rent even if these rooms are currently used for other purposes.
<i>Housing Categories (Structure Type)</i>	<p><i>Single-family, detached.</i> This is a 1-unit structure detached from any other house; that is, with open space on all four sides. Such structures are considered detached if they have an adjoining shed or garage.</p> <p><i>Single-family attached.</i> This is a 1-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.</p> <p><i>2-4 units.</i> These are units in structures containing 2, 3, or 4 housing units.</p> <p><i>5+ units.</i> These are units in structures containing 5 or more housing units.</p>
<i>Housing Rent (Contract Rent)</i>	Contract rent is the monthly rent agreed to or contracted for, regardless of any furnishings, utilities, fees, meals, or services that may be included.
<i>Housing Rent (Gross Rent)</i>	Gross rent is the <i>contract rent</i> plus the estimated average monthly cost of utilities (electric, gas, water and sewer) and fuels (oil, coal, kerosene, wood, and the like) if these are paid by the renter (or paid for the renter by someone else). In the current study, the monthly gross rents (converted to housing unit value; see <i>Housing Value</i> ) are indicated in the demographic table.
<i>Household Size</i>	The total number of persons in a <i>housing unit</i> .
<i>Housing Tenure (Ownership or Rental)</i>	A <i>housing unit</i> is occupied if the owner or co-owner lives in the unit even if it is mortgaged or not fully paid for. All occupied housing units that are not owner-occupied, whether they are rented for cash rent or occupied without payment of cash rent, are classified as renter-occupied.
<i>Housing Unit</i>	A <i>housing unit</i> may be a house, an apartment . . . a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy as separate living quarters).
<i>Housing Value (Rent)</i>	Housing value is the census respondent's estimate of how much the property would sell for if it were for sale. In the current study, the value of a rented unit in a 1- to 4-unit structure is estimated to be 100 times the monthly <i>gross rent</i> . The housing value and rents indicated by the 2000 census were updated to 2005 using a residential price inflation index available from the Federal Housing Finance Board for New Jersey. Housing value is categorized into tri-partite classification: <i>housing priced below the median, housing priced above the median, and all value housing</i> . The above housing price terms are just as they are stated. Housing priced below the median should <i>not</i> be confused with affordable or <i>Mount Laurel</i> housing as it is sometimes referred to in New Jersey. Housing priced above the median is <i>not</i> synonymous with what is sometimes referred to as market-rate housing (to contrast the market-rate from the affordable or " <i>Mount Laurel</i> " categories).
<i>Median Housing Value</i>	The median divides the value distribution into two equal parts: one-half of the cases falling below the median value of the property...and one-half above the median.
<i>Public School Children (PSC)</i>	The <i>school-age children</i> attending public school.
<i>Residential Demographic Multipliers</i>	Multipliers show the population associated with different <i>housing categories</i> as well as housing differentiated by <i>housing value, housing size (bedrooms), and housing tenure</i> .
<i>School-Age Children (SAC)</i>	The household members of elementary and secondary school age, defined here as those 5 through 17 years of age.

**TABLE II-1  
STATEWIDE NEW JERSEY  
TOTAL PERSONS AND PERSONS BY AGE**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL PERSONS	<u>AGE</u>							
		0-4	5-17	18-34	35-44	45-54	55-64	65-74	-75+
<b>Single-Family Detached, 2 BR</b>									
All Values	2.032	0.081	0.118	0.229	0.190	0.109	0.321	0.674	0.310
Below Median \$267,744	1.971	0.086	0.118	0.267	0.191	0.106	0.264	0.628	0.311
Above Median \$267,744	2.145	0.070	0.119	0.159	0.187	0.115	0.425	0.760	0.309
<b>Single-Family Detached, 3 BR</b>									
All Values	2.977	0.333	0.575	0.632	0.686	0.359	0.202	0.134	0.056
Below Median \$267,744	3.038	0.350	0.636	0.719	0.681	0.329	0.164	0.109	0.048
Above Median \$267,744	2.913	0.315	0.510	0.540	0.690	0.391	0.242	0.160	0.065
<b>Single-Family Detached, 4-5 BR</b>									
All Values	3.774	0.422	1.077	0.539	0.998	0.492	0.146	0.063	0.038
Below Median \$576,679	3.730	0.424	1.040	0.613	0.993	0.437	0.125	0.061	0.037
Above Median \$576,679	3.863	0.417	1.152	0.391	1.007	0.603	0.187	0.066	0.040
<b>Single-Family Attached, 2 BR</b>									
All Values	1.997	0.150	0.156	0.557	0.366	0.265	0.220	0.186	0.097
Below Median \$226,552	2.068	0.166	0.206	0.612	0.385	0.262	0.211	0.147	0.079
Above Median \$226,552	1.914	0.132	0.096	0.492	0.344	0.268	0.232	0.232	0.119
<b>Single-Family Attached, 3 BR</b>									
All Values	2.655	0.239	0.438	0.652	0.530	0.392	0.239	0.110	0.055
Below Median \$267,744	2.823	0.254	0.561	0.754	0.578	0.387	0.178	0.070	0.041
Above Median \$267,744	2.444	0.220	0.283	0.524	0.470	0.398	0.316	0.160	0.073
<b>Single-Family Attached, 4-5 BR</b>									
All Values	3.980	0.640	1.035	0.900	0.628	0.400	0.184	0.163	0.029
Below Median \$370,722	4.537	0.915	1.306	1.226	0.619	0.261	0.101	0.079	0.029
Above Median \$370,722	3.211	0.261	0.661	0.451	0.639	0.592	0.297	0.279	0.029
<b>5+ Units—Own Rent, 0-1 BR</b>									
All Values	1.526	0.072	0.076	0.565	0.201	0.103	0.082	0.150	0.277
Below Median \$129,835	1.424	0.068	0.090	0.333	0.151	0.106	0.089	0.245	0.343
Above Median \$129,835	1.628	0.076	0.061	0.799	0.252	0.099	0.074	0.055	0.211
<b>5+ Units—Own Rent, 2 BR</b>									
All Values	2.106	0.154	0.245	0.780	0.340	0.224	0.143	0.102	0.118
Below Median \$185,361	2.242	0.192	0.351	0.833	0.346	0.222	0.139	0.083	0.077
Above Median \$185,361	1.954	0.112	0.127	0.720	0.334	0.226	0.148	0.123	0.163
<b>5+ Units—Own Rent, 3 BR</b>									
All Values	3.109	0.343	0.769	0.894	0.539	0.253	0.163	0.096	0.052
Below Median \$206,451	3.499	0.358	1.150	0.879	0.622	0.281	0.139	0.062	0.009
Above Median \$206,451	2.719	0.328	0.388	0.910	0.455	0.224	0.188	0.131	0.095

**TABLE II-1**  
**STATEWIDE NEW JERSEY**  
**TOTAL PERSONS AND PERSONS BY AGE (Continued)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL PERSONS	AGE							
		0-4	5-17	18-34	35-44	45-54	55-64	65-74	-75+
<b>5+ Units-Own, 0-1 BR</b>									
All Values	1.694	0.094	0.125	0.530	0.304	0.145	0.124	0.159	0.214
Below Median \$185,361	1.702	0.137	0.167	0.474	0.364	0.140	0.097	0.151	0.171
Above Median \$185,361	1.682	0.036	0.069	0.605	0.223	0.150	0.159	0.171	0.270
<b>5+ Units-Own, 2 BR</b>									
All Values	1.797	0.071	0.122	0.485	0.320	0.294	0.191	0.153	0.161
Below Median \$226,552	1.771	0.074	0.131	0.520	0.324	0.290	0.164	0.121	0.147
Above Median \$226,552	1.844	0.064	0.105	0.419	0.312	0.301	0.243	0.215	0.186
<b>5+ Units-Own, 3 BR</b>									
All Values	2.469	0.213	0.471	0.537	0.481	0.332	0.243	0.129	0.063
Below Median \$226,552	2.828	0.301	0.655	0.588	0.524	0.412	0.204	0.103	0.041
Above Median \$226,552	2.104	0.124	0.283	0.486	0.438	0.250	0.282	0.155	0.086
<b>5+ Units-Rent, 0-1 BR</b>									
All Values	1.507	0.069	0.070	0.569	0.190	0.098	0.077	0.149	0.284
Below Median \$125,716	1.370	0.053	0.083	0.285	0.143	0.100	0.093	0.262	0.351
Above Median \$125,716	1.644	0.085	0.057	0.855	0.237	0.097	0.061	0.035	0.216
<b>5+ Units-Rent, 2 BR</b>									
All Values	2.303	0.207	0.323	0.967	0.353	0.180	0.113	0.069	0.090
Below Median \$177,123	2.493	0.265	0.478	0.951	0.364	0.195	0.115	0.065	0.060
Above Median \$177,123	2.107	0.147	0.165	0.984	0.342	0.164	0.112	0.073	0.121
<b>5+ Units-Rent, 3 BR</b>									
All Values	3.545	0.431	0.973	1.137	0.577	0.199	0.109	0.075	0.044
Below Median \$173,004	3.666	0.392	1.242	1.064	0.587	0.246	0.114	0.022	0.000
Above Median \$173,004	3.422	0.470	0.702	1.212	0.568	0.151	0.104	0.128	0.088
<b>2-4 Units, 0-1 BR</b>									
All Values	2.043	0.179	0.288	0.747	0.278	0.221	0.112	0.087	0.133
Below Median \$123,574	1.868	0.151	0.259	0.650	0.282	0.141	0.111	0.117	0.158
Above Median \$123,574	2.225	0.207	0.318	0.847	0.274	0.304	0.113	0.057	0.106
<b>2-4 Units, 2 BR</b>									
All Values	2.651	0.250	0.453	0.940	0.477	0.217	0.157	0.094	0.063
Below Median \$149,607	2.857	0.341	0.603	0.939	0.497	0.200	0.144	0.082	0.052
Above Median \$149,607	2.440	0.158	0.300	0.940	0.456	0.235	0.169	0.106	0.075
<b>2-4 Units, 3 BR</b>									
All Values	3.529	0.293	0.805	1.062	0.654	0.363	0.209	0.107	0.036
Below Median \$226,552	3.665	0.355	1.070	1.085	0.718	0.269	0.099	0.047	0.021
Above Median \$226,552	3.388	0.228	0.530	1.038	0.588	0.460	0.322	0.170	0.052
<b>2-4 Units, 4-5 BR</b>									
All Values	3.995	0.384	0.749	1.141	0.623	0.527	0.216	0.194	0.162
Below Median \$370,722	4.231	0.474	0.965	1.212	0.744	0.557	0.073	0.129	0.078
Above Median \$370,722	3.699	0.270	0.477	1.052	0.471	0.490	0.396	0.276	0.268

**TABLE II-1  
STATEWIDE NEW JERSEY  
TOTAL PERSONS AND PERSONS BY AGE (Continued)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL PERSONS	AGE							
		0-4	5-17	18-34	35-44	45-54	55-64	65-74	-75+
<b>All Housing Types (Own), 0-1 BR</b>									
All Values	2.139	0.144	0.282	0.529	0.448	0.247	0.167	0.146	0.176
Below Median \$185,361	1.973	0.134	0.256	0.548	0.350	0.244	0.154	0.135	0.152
Above Median \$185,361	2.326	0.155	0.312	0.507	0.560	0.250	0.181	0.158	0.204
<b>All Housing Types (Own), 2 BR</b>									
All Values	1.933	0.098	0.116	0.420	0.294	0.223	0.256	0.348	0.178
Below Median \$226,552	1.928	0.107	0.137	0.484	0.315	0.233	0.219	0.271	0.163
Above Median \$226,552	1.939	0.089	0.094	0.351	0.272	0.212	0.296	0.430	0.195
<b>All Housing Types (Own), 3 BR</b>									
All Values	2.851	0.294	0.505	0.637	0.627	0.378	0.222	0.132	0.056
Below Median \$308,935	2.931	0.313	0.567	0.707	0.656	0.356	0.181	0.102	0.049
Above Median \$308,935	2.726	0.265	0.409	0.529	0.581	0.410	0.286	0.178	0.068
<b>All Housing Types (Own), 4-5 BR</b>									
All Values	3.767	0.423	1.066	0.542	0.989	0.494	0.148	0.066	0.039
Below Median \$576,679	3.728	0.429	1.030	0.616	0.985	0.438	0.128	0.063	0.038
Above Median \$576,679	3.844	0.411	1.139	0.394	0.996	0.605	0.188	0.073	0.040
<b>All Housing Types (Rent), 0-1 BR</b>									
All Values	1.655	0.092	0.130	0.620	0.222	0.121	0.084	0.138	0.249
Below Median \$123,903	1.503	0.073	0.127	0.372	0.169	0.116	0.101	0.232	0.312
Above Median \$123,903	1.808	0.110	0.133	0.869	0.276	0.125	0.066	0.042	0.186
<b>All Housing Types (Rent), 2 BR</b>									
All Values	2.453	0.242	0.390	0.957	0.406	0.196	0.119	0.062	0.081
Below Median \$164,765	2.629	0.298	0.542	0.902	0.440	0.196	0.125	0.063	0.062
Above Median \$164,765	2.274	0.184	0.235	1.013	0.372	0.195	0.113	0.061	0.100
<b>All Housing Types (Rent), 3 BR</b>									
All Values	3.466	0.358	0.945	1.017	0.640	0.270	0.139	0.060	0.037
Below Median \$167,567	3.590	0.364	1.135	1.081	0.573	0.268	0.134	0.033	0.004
Above Median \$167,567	3.341	0.353	0.753	0.953	0.708	0.271	0.145	0.087	0.071
<b>All Housing Types (Rent), 4-5 BR</b>									
All Values	4.572	0.626	1.433	1.256	0.733	0.314	0.089	0.089	0.033
Below Median \$218,149	4.638	0.568	1.347	1.524	0.776	0.257	0.080	0.049	0.036
Above Median \$218,149	4.506	0.684	1.520	0.984	0.689	0.372	0.099	0.130	0.029

**TABLE II-2  
STATEWIDE NEW JERSEY  
SCHOOL-AGE CHILDREN (SAC)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL SAC	GRADE		
		Elementary (K-6)	Junior High School (7-9)	High School (10-12)
<b>Single-Family Detached, 2 BR</b>				
All Values	0.118	0.057	0.025	0.037
Below Median \$267,744	0.118	0.053	0.024	0.041
Above Median \$267,744	0.119	0.063	0.026	0.030
<b>Single-Family Detached, 3 BR</b>				
All Values	0.575	0.360	0.123	0.092
Below Median \$267,744	0.636	0.399	0.137	0.100
Above Median \$267,744	0.510	0.319	0.108	0.083
<b>Single-Family Detached, 4-5 BR</b>				
All Values	1.077	0.691	0.218	0.169
Below Median \$576,679	1.040	0.666	0.213	0.161
Above Median \$576,679	1.152	0.741	0.228	0.183
 <b>Single-Family Attached, 2 BR</b>				
All Values	0.156	0.099	0.029	0.028
Below Median \$226,552	0.206	0.137	0.034	0.036
Above Median \$226,552	0.096	0.055	0.023	0.018
<b>Single-Family Attached, 3 BR</b>				
All Values	0.438	0.248	0.111	0.079
Below Median \$267,744	0.561	0.314	0.159	0.088
Above Median \$267,744	0.283	0.165	0.050	0.068
<b>Single-Family Attached, 4-5 BR</b>				
All Values	1.035	0.681	0.183	0.171
Below Median \$370,722	1.306	0.934	0.194	0.178
Above Median \$370,722	0.661	0.331	0.168	0.162
 <b>5+ Units—Own Rent, 0-1 BR</b>				
All Values	0.076	0.050	0.014	0.012
Below Median \$129,835	0.090	0.058	0.018	0.014
Above Median \$129,835	0.061	0.042	0.010	0.009
<b>5+ Units—Own Rent, 2 BR</b>				
All Values	0.245	0.164	0.042	0.039
Below Median \$185,361	0.351	0.238	0.061	0.051
Above Median \$185,361	0.127	0.082	0.020	0.025
<b>5+ Units—Own Rent, 3 BR</b>				
All Values	0.769	0.488	0.167	0.115
Below Median \$206,451	1.150	0.731	0.269	0.151
Above Median \$206,451	0.388	0.244	0.066	0.078

**TABLE II-2  
STATEWIDE NEW JERSEY  
SCHOOL-AGE CHILDREN (SAC)(Continued)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL SAC	GRADE		
		Elementary (K-6)	Junior High School (7-9)	High School (10-12)
<b>5+ Units-Own, 0-1 BR</b>				
All Values	0.125	0.100	0.016	0.008
Below Median \$185,361	0.167	0.137	0.015	0.015
Above Median \$185,361	0.069	0.051	0.018	0.000
<b>5+ Units-Own, 2 BR</b>				
All Values	0.122	0.083	0.015	0.024
Below Median \$226,552	0.131	0.088	0.013	0.031
Above Median \$226,552	0.105	0.076	0.019	0.011
<b>5+ Units-Own, 3 BR</b>				
All Values	0.471	0.335	0.076	0.060
Below Median \$226,552	0.655	0.435	0.151	0.070
Above Median \$226,552	0.283	0.234	0.000	0.049
<b>5+ Units-Rent, 0-1 BR</b>				
All Values	0.070	0.044	0.014	0.012
Below Median \$125,716	0.083	0.050	0.019	0.014
Above Median \$125,716	0.057	0.038	0.009	0.010
<b>5+ Units-Rent, 2 BR</b>				
All Values	0.323	0.216	0.059	0.049
Below Median \$177,123	0.478	0.317	0.088	0.072
Above Median \$177,123	0.165	0.112	0.028	0.025
<b>5+ Units-Rent, 3 BR</b>				
All Values	0.973	0.591	0.229	0.152
Below Median \$173,004	1.242	0.814	0.251	0.177
Above Median \$173,004	0.702	0.367	0.208	0.127
<b>2-4 Units, 0-1 BR</b>				
All Values	0.288	0.168	0.055	0.064
Below Median \$123,574	0.259	0.148	0.044	0.067
Above Median \$123,574	0.318	0.190	0.067	0.061
<b>2-4 Units, 2 BR</b>				
All Values	0.453	0.304	0.079	0.071
Below Median \$149,607	0.603	0.422	0.091	0.090
Above Median \$149,607	0.300	0.182	0.066	0.051
<b>2-4 Units, 3 BR</b>				
All Values	0.805	0.468	0.189	0.147
Below Median \$226,552	1.070	0.615	0.256	0.200
Above Median \$226,552	0.530	0.316	0.120	0.093
<b>2-4 Units, 4-5 BR</b>				
All Values	0.749	0.405	0.178	0.167
Below Median \$370,722	0.965	0.481	0.319	0.165
Above Median \$370,722	0.477	0.309	0.000	0.168

**TABLE II-2  
STATEWIDE NEW JERSEY  
SCHOOL-AGE CHILDREN (SAC) (Continued)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL SAC	<u>GRADE</u>		
		Elementary (K-6)	Junior High School (7-9)	High School (10-12)
<b>All Housing Types (Own), 0-1 BR</b>				
All Values	0.282	0.181	0.065	0.036
Below Median \$185,361	0.256	0.173	0.048	0.036
Above Median \$185,361	0.312	0.191	0.085	0.036
<b>All Housing Types (Own), 2 BR</b>				
All Values	0.116	0.071	0.023	0.022
Below Median \$226,552	0.137	0.088	0.022	0.027
Above Median \$226,552	0.094	0.053	0.024	0.016
<b>All Housing Types (Own), 3 BR</b>				
All Values	0.505	0.310	0.110	0.085
Below Median \$308,935	0.567	0.353	0.125	0.090
Above Median \$308,935	0.409	0.244	0.087	0.078
<b>All Housing Types (Own), 4-5 BR</b>				
All Values	1.066	0.682	0.216	0.168
Below Median \$576,679	1.030	0.658	0.211	0.161
Above Median \$576,679	1.139	0.730	0.226	0.182
 <b>All Housing Types (Rent), 0-1 BR</b>				
All Values	0.130	0.076	0.027	0.027
Below Median \$123,903	0.127	0.072	0.028	0.028
Above Median \$123,903	0.133	0.080	0.027	0.026
<b>All Housing Types (Rent), 2 BR</b>				
All Values	0.390	0.255	0.066	0.069
Below Median \$164,765	0.542	0.363	0.084	0.095
Above Median \$164,765	0.235	0.146	0.047	0.043
<b>All Housing Types (Rent), 3 BR</b>				
All Values	0.945	0.554	0.241	0.151
Below Median \$167,567	1.135	0.662	0.289	0.183
Above Median \$167,567	0.753	0.444	0.191	0.117
<b>All Housing Types (Rent), 4-5 BR</b>				
All Values	1.433	0.942	0.271	0.221
Below Median \$218,149	1.347	0.749	0.306	0.292
Above Median \$218,149	1.520	1.136	0.235	0.149



**TABLE II-3  
STATEWIDE NEW JERSEY  
PUBLIC SCHOOL CHILDREN (PSC)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL PSC	<u>PUBLIC SCHOOL GRADE</u>		
		Elementary (K-6)	Junior High School (7-9)	High School (10-12)
<b>Single-Family Detached, 2 BR</b>				
All Values	0.101	0.045	0.020	0.035
Below Median \$267,744	0.102	0.045	0.018	0.039
Above Median \$267,744	0.098	0.046	0.024	0.027
<b>Single-Family Detached, 3 BR</b>				
All Values	0.484	0.291	0.112	0.082
Below Median \$267,744	0.542	0.330	0.123	0.089
Above Median \$267,744	0.423	0.250	0.099	0.074
<b>Single-Family Detached, 4-5 BR</b>				
All Values	0.872	0.549	0.183	0.140
Below Median \$576,679	0.861	0.538	0.186	0.138
Above Median \$576,679	0.892	0.572	0.176	0.144
 <b>Single-Family Attached, 2 BR</b>				
All Values	0.126	0.081	0.021	0.024
Below Median \$226,552	0.164	0.108	0.027	0.030
Above Median \$226,552	0.081	0.050	0.015	0.016
<b>Single-Family Attached, 3 BR</b>				
All Values	0.381	0.210	0.098	0.073
Below Median \$267,744	0.491	0.274	0.139	0.078
Above Median \$267,744	0.244	0.130	0.048	0.066
<b>Single-Family Attached, 4-5 BR</b>				
All Values	0.577	0.313	0.136	0.128
Below Median \$370,722	0.670	0.392	0.129	0.150
Above Median \$370,722	0.449	0.205	0.145	0.099
 <b>5+ Units—Own Rent, 0-1 BR</b>				
All Values	0.066	0.046	0.012	0.008
Below Median \$129,835	0.078	0.051	0.016	0.011
Above Median \$129,835	0.054	0.040	0.008	0.006
<b>5+ Units—Own Rent, 2 BR</b>				
All Values	0.206	0.138	0.036	0.032
Below Median \$185,361	0.310	0.206	0.056	0.047
Above Median \$185,361	0.090	0.062	0.013	0.015
<b>5+ Units—Own Rent, 3 BR</b>				
All Values	0.674	0.424	0.164	0.087
Below Median \$206,451	1.038	0.681	0.262	0.095
Above Median \$206,451	0.309	0.166	0.066	0.078

**TABLE II-3  
STATEWIDE NEW JERSEY  
PUBLIC SCHOOL CHILDREN (PSC)(Continued)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL PSC	PUBLIC SCHOOL GRADE		
		Elementary (K-6)	Junior High School (7-9)	High School (10-12)
<b>5+ Units-Own, 0-1 BR</b>				
All Values	0.117	0.100	0.009	0.008
Below Median \$129,835	0.167	0.137	0.015	0.015
Above Median \$129,835	0.051	0.051	0.000	0.000
<b>5+ Units-Own, 2 BR</b>				
All Values	0.098	0.067	0.013	0.018
Below Median \$226,552	0.101	0.065	0.013	0.024
Above Median \$226,552	0.092	0.072	0.013	0.007
<b>5+ Units-Own, 3 BR</b>				
All Values	0.442	0.321	0.068	0.054
Below Median \$226,552	0.598	0.406	0.134	0.058
Above Median \$226,552	0.283	0.234	0.000	0.049
<b>5+ Units-Rent, 0-1 BR</b>				
All Values	0.060	0.040	0.012	0.008
Below Median \$125,716	0.069	0.043	0.015	0.011
Above Median \$125,716	0.051	0.037	0.009	0.006
<b>5+ Units-Rent, 2 BR</b>				
All Values	0.275	0.183	0.051	0.041
Below Median \$177,123	0.432	0.286	0.081	0.065
Above Median \$177,123	0.115	0.078	0.019	0.017
<b>5+ Units-Rent, 3 BR</b>				
All Values	0.832	0.493	0.229	0.109
Below Median \$173,004	1.103	0.761	0.251	0.091
Above Median \$173,004	0.560	0.225	0.208	0.127
<b>2-4 Units, 0-1 BR</b>				
All Values	0.250	0.139	0.052	0.059
Below Median \$123,574	0.237	0.126	0.044	0.067
Above Median \$123,574	0.264	0.153	0.060	0.051
<b>2-4 Units, 2 BR</b>				
All Values	0.382	0.252	0.074	0.057
Below Median \$149,607	0.514	0.360	0.084	0.071
Above Median \$149,607	0.248	0.141	0.064	0.042
<b>2-4 Units, 3 BR</b>				
All Values	0.684	0.386	0.171	0.128
Below Median \$226,552	0.946	0.523	0.244	0.180
Above Median \$226,552	0.412	0.244	0.094	0.074
<b>2-4 Units, 4-5 BR</b>				
All Values	0.556	0.247	0.143	0.167
Below Median \$370,722	0.742	0.321	0.256	0.165
Above Median \$370,722	0.322	0.154	0.000	0.168

**TABLE II-3  
STATEWIDE NEW JERSEY  
PUBLIC SCHOOL CHILDREN (PSC) (Continued)**

STRUCTURE TYPE/ BEDROOMS/ VALUE /TENURE	TOTAL PSC	<u>PUBLIC SCHOOL GRADE</u>		
		Elementary (K-6)	Junior High School (7-9)	High School (10-12)
<b>All Housing Types (Own), 0-1 BR</b>				
All Values	0.239	0.154	0.051	0.034
Below Median \$185,361	0.222	0.144	0.043	0.036
Above Median \$185,361	0.257	0.166	0.059	0.032
<b>All Housing Types (Own), 2 BR</b>				
All Values	0.094	0.057	0.018	0.020
Below Median \$226,552	0.110	0.068	0.019	0.024
Above Median \$226,552	0.077	0.046	0.017	0.015
<b>All Housing Types (Own), 3 BR</b>				
All Values	0.429	0.254	0.098	0.077
Below Median \$308,935	0.487	0.293	0.112	0.082
Above Median \$308,935	0.339	0.192	0.077	0.069
<b>All Housing Types (Own), 4-5 BR</b>				
All Values	0.860	0.540	0.181	0.139
Below Median \$576,679	0.850	0.530	0.183	0.137
Above Median \$576,679	0.880	0.561	0.176	0.143
<b>All Housing Types (Rent), 0-1 BR</b>				
All Values	0.114	0.066	0.025	0.023
Below Median \$123,903	0.113	0.064	0.024	0.025
Above Median \$123,903	0.115	0.068	0.026	0.021
<b>All Housing Types (Rent), 2 BR</b>				
All Values	0.331	0.215	0.059	0.057
Below Median \$164,765	0.477	0.321	0.079	0.077
Above Median \$164,765	0.182	0.107	0.038	0.037
<b>All Housing Types (Rent), 3 BR</b>				
All Values	0.819	0.468	0.227	0.123
Below Median \$167,567	1.010	0.600	0.274	0.137
Above Median \$167,567	0.627	0.336	0.180	0.110
<b>All Housing Types (Rent), 4-5 BR</b>				
All Values	0.894	0.500	0.213	0.182
Below Median \$218,149	1.077	0.531	0.270	0.276
Above Median \$218,149	0.709	0.468	0.154	0.087